

# NORTON SOUND SERVICE AREA

## OVERVIEW

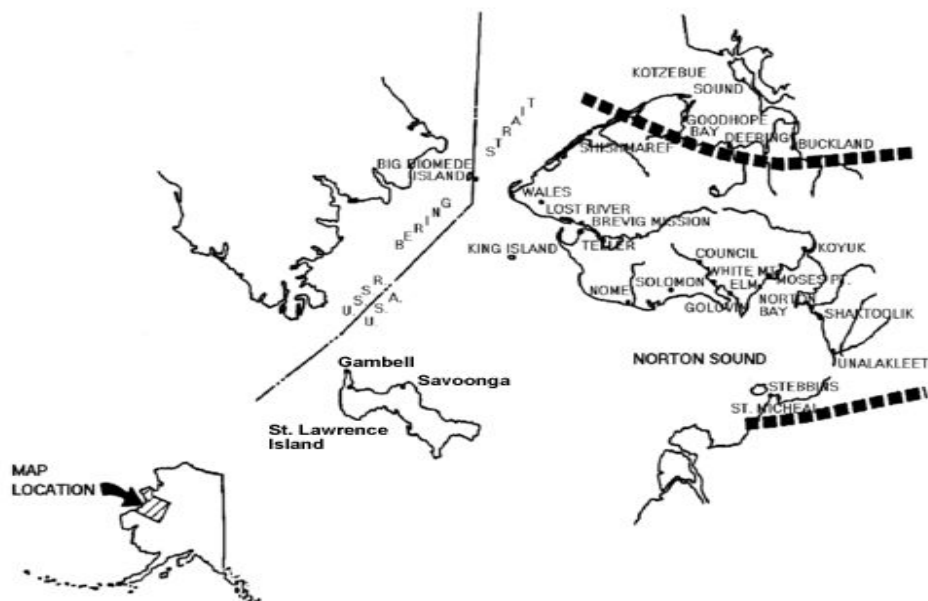
### Alaska Native 2003 User Population.

<b>NORTON SOUND SERVICE AREA</b>	<b>7,080</b>
Norton Sound Health Corporation *	7,080

Users are defined as beneficiaries who used a facility that reports through the Indian Health Service data system at least once between 10/1/2000 and 9/30/2003.

\* Reflects adjustments made to tribes with data submission problems.

**Environmental Factors.** The Norton Sound Service Area covers about 23,088 square miles in Northwestern Alaska on the Seward Peninsula. The area extends into the Bering Sea toward Siberia and includes Little Diomedede Island, Gambell and Savoonga on St. Lawrence Island, 13 communities along the Bering Straits-Norton Sound coast and the regional center of Nome. Nome is on the south shore of the peninsula facing Norton Sound, 500 miles northwest of Anchorage.



Most of the Natives of the region are from three distinct language and cultural groups of Eskimos: Inupiaq, Central Yup'ik, St. Lawrence Yup'ik and Cup'ik. Nome contains about 30% of the Native population of the region. The remaining 17 communities vary in size from six summer residents in Council to 655 in Unalakleet. Most of the Native people living in the region's villages still rely heavily on subsistence harvests of land and sea for their existence.

A cool marine climate prevails in the summer, and the winters are cold. The mean January temperature is 4 degrees, with routine winter lows of -20 degrees to -40 degrees. Combined with

the persistent year-round breeze, which averages 11 knots, the wind chill factor in the winter can reach -50 to -70 degrees. In July, the temperatures range from 50 to 70 degrees and are accompanied by seasonal rains. Spring and fall are short seasons of a month's duration. The coastal villages and Nome have shore-bound pack ice for about eight months of the year.

**Utilities.** Most of the villages and Nome have electricity in residential homes and in public buildings. Electricity is not available in the unincorporated villages of Solomon and Council, which each have less than 30 year-round residents.

Nome has a water and sewer system available to all the city's residents, excluding a few of the periphery settlement areas.

Nevertheless, several of the homes in Nome still use "honey buckets" for waste disposal and must have water delivered by truck or haul it themselves. Most of the villages have no central water or sewer systems. There has been some improvement in

recent years, but there is still much progress to be made. In lieu of a water and sewer system, almost all of the villages have a shower facility and a laundromat (often combined as a "Washateria"). A city building houses the washateria and usually the local government offices.

**Norton Sound Service Unit  
Number of Homes With and Without Complete  
Water and Sewer Service <sup>1</sup>**

	# Homes With	# Homes Without	Total # of Homes <sup>2</sup>
<b>NORTON SOUND SERVICE UNIT</b>	<b>745</b>	<b>631</b>	<b>1,376</b>
Norton Sound Health Corporation	745	631	1,376

<sup>1</sup>Complete service means operable plumbed indoor water and sewer service. Information applies only to year-round primary homes, including individual homes, duplexes and apartment units. Data from FY 2002.

<sup>2</sup>Excludes homes covered by urban local government water and sewer service.  
Source: Alaska Area Native Health Service Office of Environmental Health.

**Transportation.** Nome is accessible by sea transportation during the summer months and by air. Daily jet service connects Nome and Anchorage. Small commuter "bush" planes provide transportation between Nome and the region's villages. During the summer months, Little Diomed is accessible only by helicopter. Nome has about fifteen miles of paved roads. Three unpaved gravel roads extend from Nome about 70 miles each in three different directions into the wilderness. These roads are not maintained in the winter. In the summer, it is possible to drive north to the village of Teller and south to Council. During the winter, residents of the area use snowmachines or dogsleds to traverse the frozen ground, rivers, lakes and even the Bering Sea.

Boats supplement airplane transportation during the summer. Barge and freight companies make deliveries when the Bering Sea is ice-free. Because Nome has no harbor, the companies transport freight to Nome from ships anchored 1.5 miles offshore. Some barge transportation is available to the surrounding villages.

**Housing.** Government quarters in Nome consist of two single family houses and a three-bedroom trailer. Housing in Nome is often difficult to obtain. Two hotels offer reasonable accommodations.

**Education.** Educational facilities in Nome include an elementary school, junior high, high school and the Northwest Campus of the University of Alaska-Fairbanks (NWC). Within the last few years, every village of the region has constructed and opened schools offering grades

Kindergarten (K) through 12. This reduced the number of youth required to depart the region to attend boarding schools such as Mt. Edgecumbe in Sitka. The City of Nome and many of the villages also have Head Start and preschool programs.

Though its size is very small and its offerings are fairly limited, NWC receives high utilization by the residents of the region. The school offers standard two-year academic courses leading to certificates or associates degrees, as well as classes applicable to four-year degrees from the University of Alaska-Fairbanks. NWC also offers many local interest courses not available through the Community Schools (a program of the Nome Public Schools). An innovative "distance learning" approach uses audio conferencing capabilities and learning resource centers in many of the villages to provide regular course work in a modified classroom/instructor setting. Also, NWC instructors regularly travel to the villages to teach on-site courses.

## Norton Census Area Education Status for the Population 25 Years and Over

	Males	Females
<u>White Alone population:</u>		
High school graduate (includes equivalency)	145	60
Bachelors degree or higher	293	264
<u>AI/AN Alone population:</u>		
High school graduate (includes equivalency)	876	709
Bachelors degree or higher	35	77

Source: U.S. Census Bureau, Census 2000 Summary File 3.

**Natural Resources.** Residents in the Norton Sound Service Area rely on natural resources from the land and sea. Mined resources on the Seward Peninsula include gold, tin and oil. Game, fish, sea mammals (walrus, seal and whale), and gathered berries comprise the natural subsistence harvest.

Nome is the commerce and government center for Northwest Alaska. The center of Alaska's reindeer industry is in the Nome area. State and Federal government, the gold mining industry, transportation, merchandising and tourism are the major contributors to employment. Nome is the end of the trail of the famed Iditarod Sled Dog Race held in March of each year. The race starts in Anchorage and ends in Nome more than 1,049 miles later.

**Economic Conditions.** The following information displays the employment, per capita income and poverty status for the White alone population and American Indian/Alaska Native alone population for the Nome census area:

## Nome Census Area

<u>White alone population:</u>	
Per Capita Income (1999)	\$34,791
Below Poverty Level	57
<u>AI/AN alone population:</u>	
Per Capita Income (1999)	\$10,603
Below Poverty Level	1,469

\*AI/AN=American Indian/Alaska Native.  
Source: U.S. Census Bureau, Census 2000 Summary File 3.

## Norton Sound Area Employment Status for Population 16 Years and Over

	Males	Females
<u>White Alone population:</u>		
In labor force	722	485
Employed	684	473
Unemployed	17	12
<u>AI/AN* Alone population:</u>		
In labor force	1,211	1,112
Employed	810	952
Unemployed	395	160

\*AI/AN=American Indian/Alaska Native.  
Source: U.S. Census Bureau, Census 2000 Summary File 3.

**Tribes.** Listed below are the federally recognized tribes in the region.

## **Norton Sound Health Corporation Region**

Native Village of Brevig Mission - General Delivery, Brevig Mission, AK 99785  
Chinik Eskimo Community (aka Golovin) - General Delivery, Golovin, AK 99762  
Native Village of Council - P.O. Box 2050, Nome, AK 99762  
Native Village of Diomede, P.L. 93-638, Title I, (aka Inalik) - P.O. Box 7099, Diomede, AK 99762  
Native Village of Elim IRA - P.O. Box 39010, Elim, AK 99739  
Native Village of Gambell - P.O. Box 99, Gambell, AK 99762  
King Island Native Community IRA - P.O. Box 992, Nome, AK 99762  
Native Village of Koyuk - P.O. Box 30, Koyuk, AK 99753  
Native Village of Mary's Igloo - P.O. Box 572, Teller, AK 99778  
Nome Eskimo Community - P.O. Box 1090, Nome, AK 99762  
Native Village of Savoonga - P.O. Box 129, Savoonga, AK 99769  
Native Village of Saint Michael - General Delivery, St. Michael, AK 99659  
Native Village of Shaktoolik - P.O. Box 100, Shaktoolik, AK 99771  
Native Village of Shishmaref - P.O. Box 72110, Shishmaref, AK 99772  
Village of Solomon - P.O. Box 243, Nome, AK 99762  
Stebbins Community Association IRA - P.O. Box 2, Stebbins, AK 99671  
Native Village of Teller - P.O. Box 590, Teller, AK 99778  
Native Village of Unalakleet - P.O. Box 70, Unalakleet, AK 99684  
Native Village of Wales - P.O. Box 549, Wales, AK 99783  
Native Village of White Mountain - P.O. Box 84082, White Mountain, AK 99784

## **DESCRIPTION OF HEALTH-CARE DELIVERY SYSTEM**

The Norton Sound Health Corporation (NSHC) serves the people of the area with direct preventive health services. The NSHC organized in 1970 through funding from the Office of Economic Opportunity. It operated within the Kotzebue Service Area and worked with the Indian Health Service, State Public Health Service and the Methodist owned and operated hospital in Nome.

During the summer of 1974, the NSHC separated from the Kotzebue Service Area. The division came as a result of the Alaska Native Claims Settlement Act which cut the Kotzebue Service Area into two regional corporations. This was a natural geographical split because Nome was a population center in the south and Kotzebue was a population center in the north.

A Board of Directors governs the NSHC. The 23 member Board includes representatives from each of the communities in the area, from local agencies, from King Island Village (a vacant island village whose families and descendants now reside in Nome) and the City of Nome. The goal of the NSHC is to coordinate health services delivery throughout the region and to serve as a model for rural health care delivery.

The Norton Sound Health Corporation owns and operates the Norton Sound Regional Hospital in Nome. Adjoining a newer wing is the old Maynard McDougall Memorial Hospital. Built in 1948, the old building now houses support services, administration and dental facilities. The NSHC

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added inpatient and outpatient space in April 1977. NSHC and State of Alaska funds were used for the addition of a long term care wing in 1988. Current structures have significant deficiencies in their mechanical and electrical systems, handicapped accessibility, and compliance with codes and regulations. All are in need of replacement.

### **Norton Sound Regional Hospital, P.O. Box 966, Nome, Alaska 99762** **Unalakleet Sub-regional Clinic,**

The Norton Sound Regional Hospital is owned by the Norton Sound Health Corporation (NSHC) and operated under a P.L. 93-638, Title V funding agreement with the Indian Health Service. Services include direct care, preventive care, and health promotion within the region. The NSHC divides services into two Divisions: a Hospital Services Division and a Regional Health Services Division.

The Hospital Services Division maintains 19 acute care beds, 15 long-term care beds, an outpatient clinic and an emergency room. A full complement of ancillary and support services are available, including radiology and x-ray, pharmacy, laboratory, respiratory and physical therapy, nutrition, medical records, central sterile supply, plant operations and domestic services.

The Regional Health Services Division provides services in many areas. These include optometry, dental care, village health, environmental health, emergency medicine, public health nursing, audiology, residential care, behavior health outpatient treatment, and family services. Norton Sound contracts with Maniilaq for inpatient regional treatment center for substance abusers. The specialty and tertiary referral location for the Norton Sound Hospital is the Alaska Native Medical Center in Anchorage.

Norton Sound provides the following family services: homemaker, maternal and child health care, infant development detection, the Women, Infant and Children's program, Infant Learning Program, Fetal Alcohol Syndrome, and the Developmental Disabilities Services.

The **Unalakleet Sub-Regional Health Center** opened in FY 2004 with HRSA 330 Community Health Center grant funding. The clinic is staffed by mid-level providers and offers basic laboratory, pharmacy and radiology services. Itinerant physician, dental, physical therapy and optometry services are provided. The secondary referral location for Unalakleet is the Norton Sound Regional Hospital.

Trained community health aides deliver medical care in the villages. The following have village clinics and community health aides:

Brevig Mission	Koyuk	Shaktoolik	Unalakleet
Elim	Little Diomedes *	Shishmaref	Wales
Gambell	St. Michael	Stebbins	White Mountain
Golovin	Savoonga	Teller	

\* The Native Village of Diomedes manages the community health aide/practitioner in their community under a P.L. 93-638, Title I contract with the Indian Health Service.

## NON-TRIBAL HEALTH AGENCIES AND FACILITIES AND TYPES OF SERVICES PROVIDED TO SERVICE POPULATION

In addition to the Norton Sound Health Corporation, several other health and social agencies operate in the service area. Norton Sound contracts with the State of Alaska for the public health nurses. Three public health nurses, one registered nurse and one community health aide are responsible for health promotion and maintenance and disease prevention. There are two privately employed dentists in Nome. An Anchorage-based chiropractor makes monthly visits to Nome, and an optometrist with staff visits the rural communities every three to four months.

## HEALTH SERVICES AND FACILITIES PLANNING ISSUES

Despite the additions to the Norton Sound Hospital completed in 1977 and 1988, the facility has less than half the projected space required to serve the Native population of the area in the year 2007. Since this facility also services the non-Native population of the area, the shortfall in space is even greater. Aside from lack of space, the current facilities have significant deficiencies in their mechanical and electrical systems, handicapped accessibility and compliance with codes and regulations. A new facility is in the site preparation and design phase of the Indian Health Service construction priority process.

Sanitation is a major problem for most villages. Only three villages, Unalakleet, Elim and Shaktoolik have complete water and sewer systems. For the homes without piped water and sewer, a typical bathroom is a honeybucket and a small washing basin with standing water. In some of the older houses, the bathroom is behind a curtain. The villages need water, sewer and waste disposal systems. Poor sanitation conditions are the cause of periodic outbreaks of infectious diseases.

## HEALTH STATUS OF ALASKA NATIVES LIVING IN THE NORTON SOUND SERVICE AREA

### Mortality.

The leading cause of death for Alaska Natives in the Norton Sound Service Area is cancer, followed by accidents and heart disease.

Norton Sound Service Area Alaska Native Deaths Three-Year Average Crude Death Rates per 100,000 Population			
Leading Causes of Death	1994-1996 /4	1995-1997 /4	1996-1998 /4
1) Malignant Neoplasms /1	110.6	131.7	166.4
Lung Cancer	52.9	51.7	60.1
2) Unintentional Injuries (Accidents) /2	144.2	112.9	138.7
Motor Vehicles	38.5	37.6	41.6
Water Transport/Drowning	19.2	18.8	46.2
3) Heart Disease	139.4	122.3	101.7
4) Suicide	72.1	51.7	64.7
5) Chronic Obst. Pul. Diseases	48.1	47	55.5
6) Alcohol Related /3	38.5	42.3	55.5
7) Cerebrovascular	43.3	47	50.8
8) Homicide	0.3	0.7	23.1

1/ Lung Cancer is included in Malignant Neoplasms.

2/ Does not include injuries purposefully inflicted or injuries undetermined whether purposefully or accidentally inflicted. Motor Vehicle and Water Transport/Drowning are also counted in the total Accidents; it does not include alcohol related deaths.

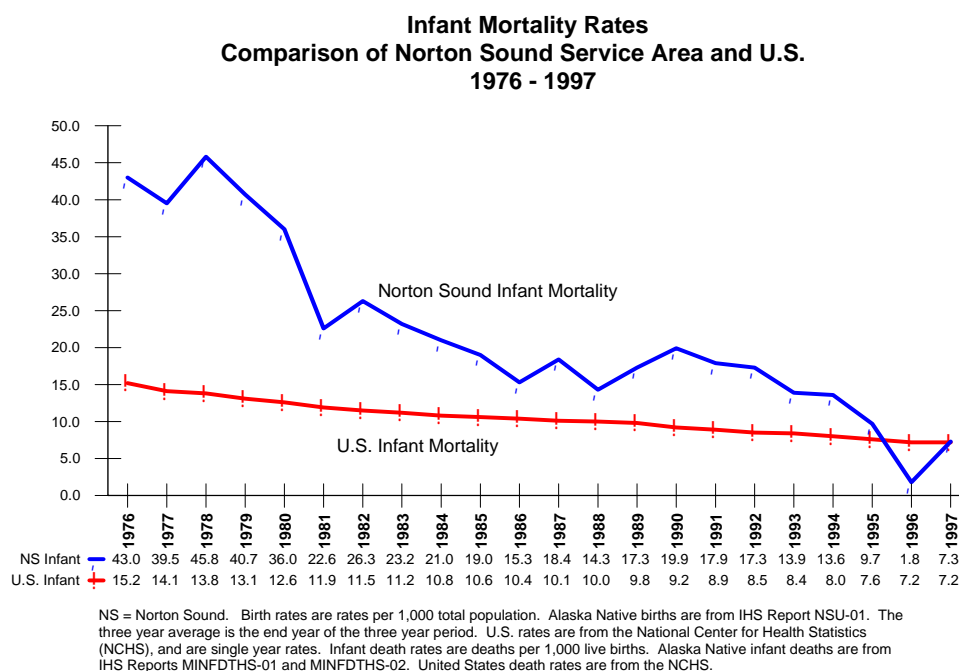
3/ Alcohol Related deaths include alcoholic psychoses, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol.

4/ Causes not included when deaths average less than one per year in 1995-97.

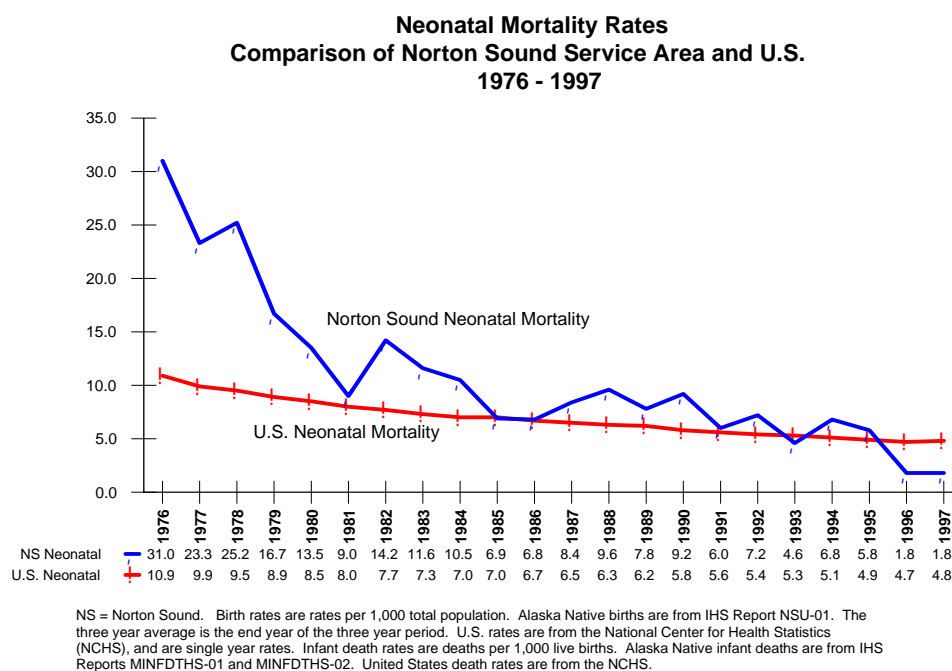
Alaska Area Native Health Service, Division of Planning, Evaluation & Health Statistics.

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**Infant Mortality.** The following graph compares the Alaska Native infant mortality rate to the U.S. all races.



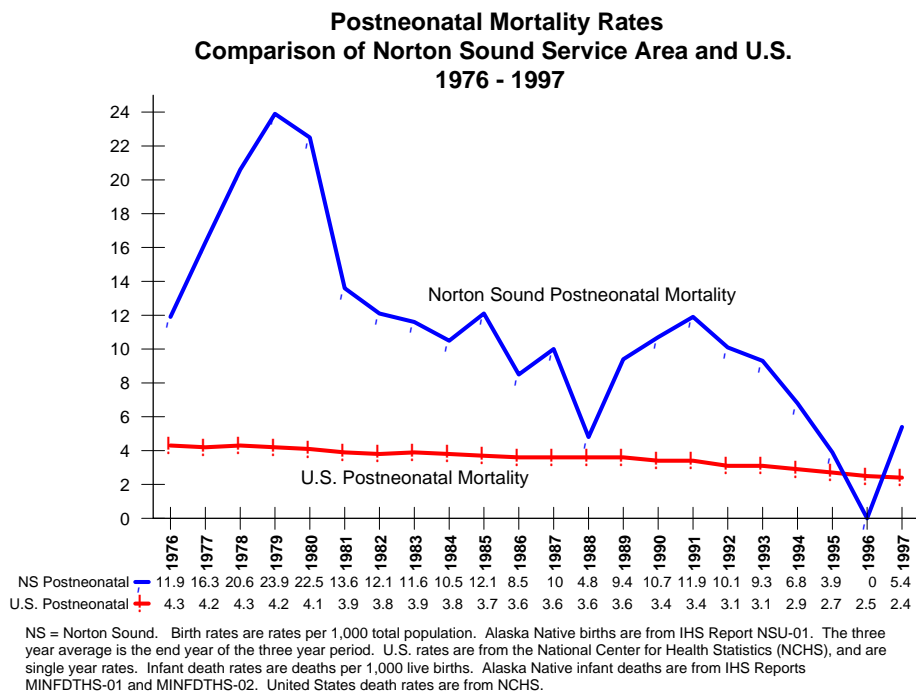
**Neonatal Mortality.** The following graph compares the Norton Sound Service Area with the U.S. neonatal death rates. The neonatal period is defined as less than 28 days of age.



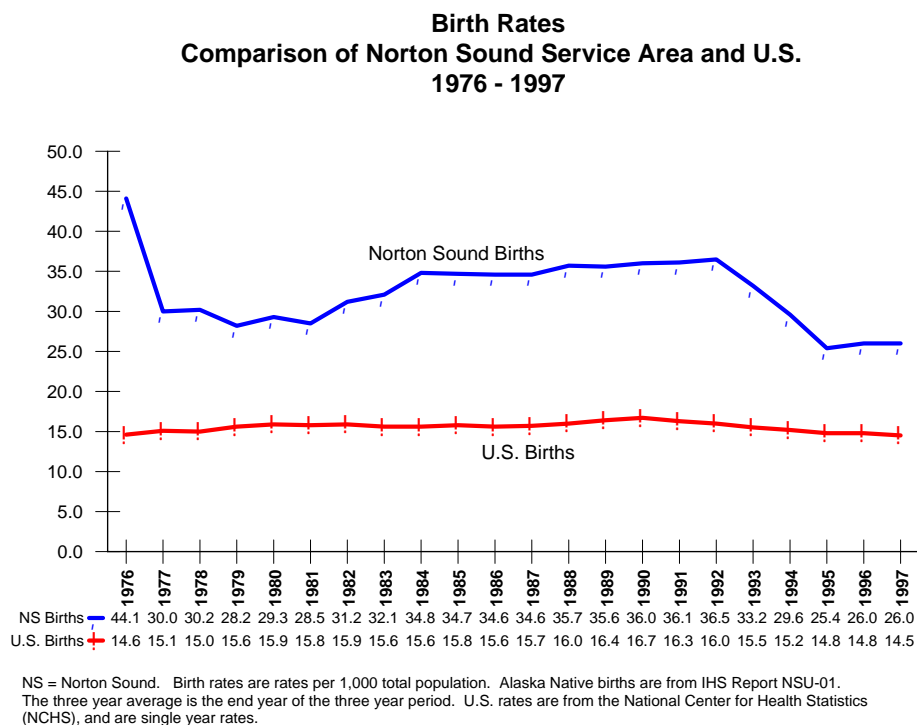


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**Postneonatal Mortality.** The postnatal period is defined as 28 to 365 days of age.



**Birth Rates.** The birth rates for Norton Sound Service Area and the U.S. are in the following graph.

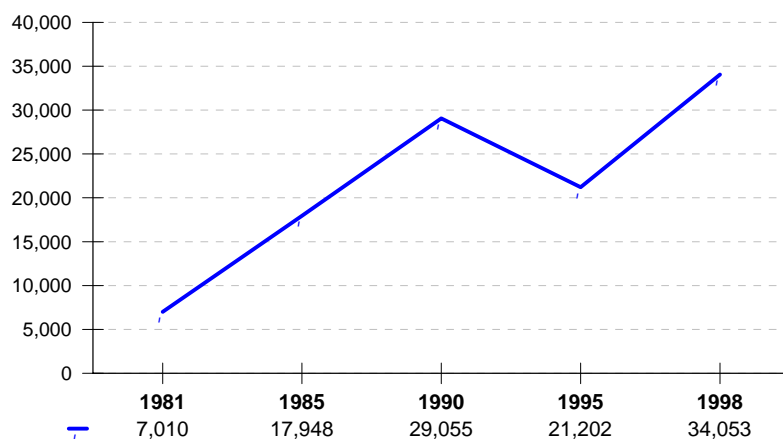




## OUTPATIENT WORKLOAD/DIAGNOSES

The outpatient workload for the Norton Sound Regional Hospital is shown in the following graph.

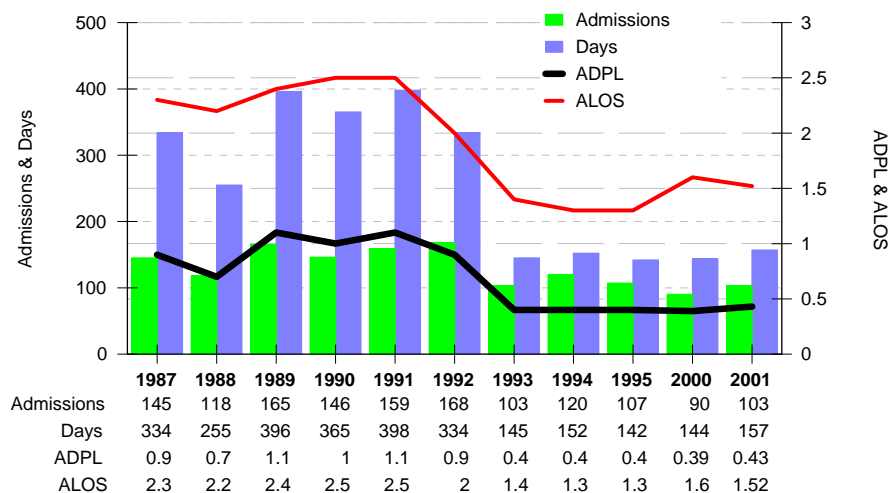
**Norton Sound Regional Hospital  
Outpatient Workload: FY 1981 - FY 1998**



Source: Indian Health Service automated Outpatient Reporting System in Albuquerque, APC Report 1A for FY 1995, FY 1996 and FY 1997. Other years are from the Norton Sound Hospital local data system.

## INPATIENT WORKLOAD

**Norton Sound Service Unit  
Newborn Inpatient Workload  
FY 1987 - FY 2001**

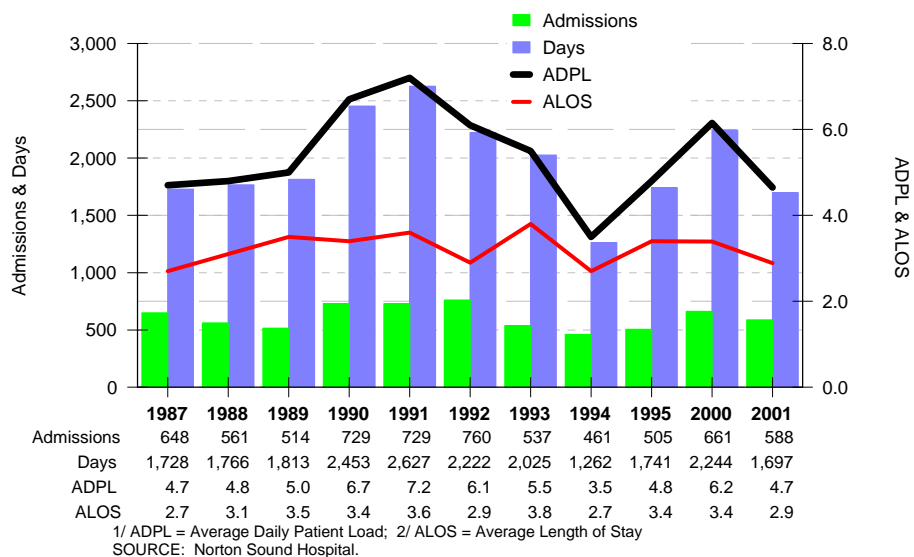


1/ ADPL = Average Daily Patient Load; 2/ ALOS = Average Length of Stay  
SOURCE: Norton Sound Hospital.

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The inpatient workload excluding newborns is shown in the following graph.

**Norton Sound Service Unit  
Inpatient Workload Excluding Newborns  
FY 1987 - FY 2001**



## DISCHARGE DIAGNOSES

**Norton Sound Hospital - Leading Causes of Discharges: FY 2001 - FY 2002**

	FY 2001	FY 2002
Deliveries (Childbirth)	77	104
Accidents & Injuries	32	59
Psychoses	19	37
Pneumonia	42	36
Bronchitis, Emphysema	22	35
Heart Disease	24	27
Infected Skin & Abrasions	11	25
Complications of Pregnancy	17	22
Cerebrovascular Disease	3	21
Alcohol Abuse	16	20
Urinary Tract Diseases	12	14

Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 2C.